

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 6557 **TITLE:** INDUSTRIAL ELECTRICIAN I **GRADE:** S-17

DEFINITION:

Under direct supervision, performs routine, entry-level work associated with the installation, maintenance, and repair of industrial electrical systems and equipment; and performs related work as required

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

The Industrial Electrician I class is distinguished from the Industrial Electrician II class in that positions assigned to the Industrial Electrician I class perform routine entry-level work under close supervision with specific guidelines and instruction. Positions assigned to the Industrial Electrician II class perform journeyman level work exercising considerable initiative and judgment.

ILLUSTRATIVE DUTIES:

Assists in the installation, maintenance, and repair of electrical systems and equipment up to 5000 volts and 4000 amps;

Monitors electrical power distribution through out the plant using power monitors or the scada system;

Maintains equipment and associated controls as a part of the preventive maintenance program; replaces and/or repairs lighting fixtures, emergency lights and exit lights throughout the plant;

Performs preventive maintenance and repairs on various equipment including motors up to 500 horse power and generators up to 2500 kilowatts ;

Installs circuits for motors and motor controls and equipment using all types of wiring methods (i.e. rigid metal conduits up to four inch, armored cables, etc.);

Assists in troubleshooting, repairs and/or installation of main switchboards, main and branch circuits breakers, disconnects and wiring devices such as switches, convenience receptacles and dedicated receptacles;

Diagnoses problems and repairs/replaces failed lighting systems and controls as well as electromagnetic and electronic ballasts on lighting equipment;

Troubleshoots or assists in troubleshooting/repairing live electrical circuits with voltages up to 600 volts ac;

Operates assigned service vehicle and maintains inventory of spare parts;

Makes costs and material estimates;

Collects data for preventive maintenance system and maintains activity logs;

Responds to routine and emergency service calls after normal working hours;

Follows safety regulations and procedures.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of the equipment, standards, and practices of the electrical trade;
Knowledge of applicable county, state and national electrical, NFPA and safety codes;
Knowledge of safety regulations and procedures as well as common hazards associated with working with electricity;
Ability to plan and perform work of the trade at the apprentice-level;
Ability to follow written and oral instructions as well as diagrams, schematics, blue prints and manufacturer's manuals;
Ability to estimate time and material needs;
Ability to use personal computers for logging time or inputting information into the preventive maintenance system;
Ability to maintain good interpersonal relationships;
Ability to train/instruct other employees as needed;
Ability to climb ladders and scaffolds and routinely work in dark, hot, cold or damp working environments in tiring, physically demanding positions for long periods of time with possible exposure to hazardous materials as well as exposure to hazardous chemicals, infectious bacteria, and the hazards of high voltage electrical shock;
Ability to work inside and outside in inclement weather, climbing tall ladders or aerial work platforms up to sixty five feet or descending into underground manholes or tunnels.

EMPLOYMENT STANDARDS:

Any combination of education and experience equivalent to completion high school graduation or a G.E.D issued by a state department of education,
AND;

Successful completion of two years of an approved apprentice training program or equivalent electrical experience, preferably in an industrial environment.

NECESSARY SPECIAL REQUIREMENTS:

Adequate color perception to distinguish colors of electrical wiring.

CERTIFICATES AND LICENSES REQUIRED:

Possession of a valid state motor vehicle operator license.

REVISED:	August 31, 2006
REVISED:	January 24, 2001
ESTABLISHED:	December 7, 1987